How to operationalize accounting under Article 6 market mechanisms of the Paris Agreement

Müller, Benito ; Michaelowa, Axel

Abstract: The role of market mechanisms was far from certain in the lead up to the 2015 Paris Climate Conference. The use of 'constructive ambiguity' led to Article 6 of the Paris Agreement, with Article 6.2 specifying a mechanism with limited international oversight, and Article 6.4 establishing a 'Sustainable Development Mechanism' (SDM) subject to detailed rules. Clear operationalization of these mechanisms remains a challenge, especially regarding the critical accounting issue that could not be resolved at the 2018 Katowice Climate Conference (COP24) – how to apply corresponding adjustments, especially regarding sectors not covered by targets under nationally-determined contributions (NDCs). By using fictitious examples, we explain two possible approaches to using Internationally Transferred Mitigation Outcomes (ITMOs) under Article 6.2 for achieving NDCs: a 'target-based' one where the acquiring Party adds the ITMO amount to the target level of its NDC; and a 'tally-based' one where the acquiring Party removes the ITMO amount from the final tally of its NDC. We discuss how these approaches influence the way to make corresponding adjustments and to avoid 'double counting'. The first one leads to 'target/budget-based accounting', the second one to 'emission-based accounting'. For mitigation outside the scope of the host Party's NDC, we propose using a tally-based interpretation of ITMO use, as opposed to the target-based variety used in the 1997 Kyoto Protocol, and stress the need for additionality testing. This interpretation allows for mandatory corresponding adjustments for all ITMO usage, while the host Party NDC level remains unchanged. A buffer registry is created for corresponding non-NDC adjustments of the selling party.

DOI: https://doi.org/10.1080/14693062.2019.1599803

How to operationalize accounting under Article 6 market mechanisms of the Paris Agreement

Benito Müller[1,2], **Axel Michaelowa**[3,4]

Contact:
benito.mueller@philosophy.ox.ac.uk
phone: +447876566975
axel.michaelowa@pw.uzh.ch
phone: +41433550073

Acknowledgements
We would like to thank Túlio Andrade, Martin Hession, Kelley Kizzier and Jose Miguez for their input to an ecbi Policy Brief on which this article draws heavily.

[1] European Capacity Building Initiative
University of Oxford,
Wolfson College,
Oxford OX2 6UD
UK

[2] Wolfson College, University of Oxford
Oxford OX2 6UD
UK

[3] University of Zurich
Department of Political Science
Affolternstrasse 56
8050 Zürich
Switzerland

[4] Perspectives Climate Research
Hugstetter Strasse 7
79106 Freiburg
Germany

Abstract

The role of market mechanisms was far from certain in the lead up to the 2015 Paris Climate Conference. The use of "constructive ambiguity" led to Article 6 of the Paris Agreement, with Article 6.2 specifying a mechanism with limited international oversight, and Article 6.4 establishing a 'Sustainable Development Mechanism' (SDM) subject to detailed rules. Clear operationalisation of these mechanisms remains a challenge, especially regarding the critical accounting issue that could not be resolved at the 2018 Katowice Climate Conference (COP24) – how to apply corresponding adjustments, especially regarding sectors not covered by targets under nationally-determined contributions (NDCs). By using fictitious examples, we explain two possible approaches to using Internationally Transferred Mitigation Outcomes (ITMOs) under Article 6.2 for achieving NDCs: a 'target-based' one where the acquiring Party adds the ITMO amount to the target level of its NDC; and a 'tally-based' one where the acquiring Party removes the ITMO amount from the final tally of its NDC. We discuss how these approaches influence the way to make corresponding adjustments and to avoid 'double counting'. The first one leads to 'target/budget-based accounting', the second one to 'emission-based accounting'. For mitigation outside the scope of the host Party's NDC, we propose using a tally-based interpretation of ITMO use, as opposed to the target-based variety used in the 1997 Kyoto Protocol, and stress the need for additionality testing. This interpretation allows for mandatory corresponding adjustments for all ITMO usage, while the host Party NDC level remains unchanged. A buffer registry is created for corresponding non-NDC adjustments of the selling party.

Key policy insights

- Under the Paris Agreement, transfers of emissions units between two countries through the Article 6 mechanisms need a corresponding adjustment on both sides to prevent double counting.
- Corresponding adjustments can be applied either to emissions targets under NDCs or measured emissions levels.
- The transfer of emissions reduction credits generated outside an NDC should lead to a corresponding adjustment of a buffer registry of the selling country, but not its emissions level/NDC target. Such credits should only be generated if additionality of the reductions is shown.

.

Key Words:

UNFCCC; Paris Agreement; market mechanisms; environmental integrity, accounting

1 Introduction

Market mechanisms are currently the most contentious topic in the negotiations about the operationalization of the Paris Agreement (PA), as shown by the inability of the 2018 Katowice Climate Conference (COP24) to agree on rules for them. Key points of contention are whether only activities within, or also outside, the scope of Nationally Determined Contributions (NDCs) should be covered, and how the accounting of transfers of Internationally Transferred Mitigation Outcomes (ITMOs) is to be done in a way that safeguards environmental integrity. In order to make the consequences of different options clear to the reader, we illustrate them applying fictitious examples from the fantasy world "Middle Earth" created by the author JRR Tolkien (1968).

1.1 Constructive ambiguity regarding terminology used in Article 6

The language on market mechanisms in Article 6 is complex because it reflects a range of concerns and interests (see e.g. Amellina 2018, Cames and Healy 2016, Fuessler et al. 2015 and Obergassel and Asche 2017 describing the wide range of Party submissions in the negotiations). The successful agreement on Article 6 was only possible by applying "constructive ambiguity", where the agreed outcome remains open to contradictory interpretations (see ADB 2018, and IETA 2017 which tend towards a wide and lenient interpretation, while Michaelowa and Hoch 2017 and New Climate Institute 2018 interpret the wording in a strict way). Mizuno 2017 provides an illustrative overview of the accounting challenges presented by Article 6.

1.2 The 'Macro'/'Micro' distinction

This paper uses a 'macro'/'micro' distinction that is borrowed from economics, insofar as the latter relates to activities (projects or policies) and the former to parameters (emissions, renewable energy generation, energy efficiency improvement) that emerge from the collective outcome of these activities.

Macro-level concepts relate to the 'quantitative scope' of NDCs such as 'quantified emission target level' and the final level ('tally') expressed in emissions or other terms used to determine whether the target has been achieved or not. This final tally is determined by ('micro-level') activities in ways that are not always directly attributable. Activities do not add up to the total target, as tiny reactions of many dispersed actors on mitigation policies are not captured by activity-related assessments. This can have an important impact on crediting of policies under Articles 6.2 and 6.4.

International Emission Trading under the 1997 Kyoto Protocol is a real-world example of a macro-level scheme while the Clean Development Mechanism (CDM) is a 'micro-level' scheme. Article 6 is likely to see both approaches, and governments need to understand the differences between them when planning how to reach their NDC targets while using Article 6. The final outcome of the (macro-level) accounting exercise may differ significantly from the sum of the micro level - the NDC target may be missed even if the sum of mitigation from specific activities suggests it should be reached.

2 Nationally Determined Contributions (NDCs) and ITMO usage

NDC "achievement" refers to the measured level of the target metric relative to the associated target level. We propose to call this the 'final tally' of the quantitative scope.[1]

There is widespread consensus that under the PA, ITMOs should only be used to achieve an NDC with a commensurate quantified component (see Graichen et al. 2016, Howard et al. 2017 and La Hoz Theuer et al. 2017 regarding widely differing characteristics of NDCs, and Kreibich 2018 regarding ambition increase). Given this, two interpretations of corresponding adjustments due to ITMO transfers suggest themselves:

- changing the relevant target level by adding the ITMO amount to it; or
- changing the relevant final tally by subtracting the ITMO amount from it.

Let us refer to these as the 'target-based' and the 'tally-based' interpretation respectively (see Fig. 1). These are pure 'macro-level' interpretations. It is likely that the tally-based approach will be adopted, as it was largely uncontested in Katowice.

Fig. 1 illustrates the two approaches in relation to the 'status quo ante'– that is, the situation before the transfer of Mitigation Outcomes from the originating Party ('Originator') to the acquiring and using Party ('User').

3 Safeguarding Environmental Integrity – the inside/outside question

Concerning ITMO transfer/usage, at least three types of environmental integrity can be discerned: 'target integrity', 'tally integrity', and 'global integrity' (see also the discussion by Schneider et al. 2017a and 2017b; for a discussion on non-accounting related issues of environmental integrity see Michaelowa and Butzengeiger (2017) and Schneider and La Hoz Theuer (2018).):

- An ITMO transfer/use should not lead to a greater sum total of target levels of the regime's NDCs than what would have been the case without it.
- An ITMO transfer/use should not lead to a greater sum total of final tallies of the regime's NDCs than without it.
- *Ceteris paribus*, global aggregate GHG emissions during a specified period would be the same with or without the ITMO transfer/usage.

How does environmental integrity relate to 'corresponding adjustments' and 'double counting'? We first discuss the inside/outside question, then double counting in general.

[1] For instance, the measured amount of CO_2 emitted during 2016 by the set of sources specified.

3.1 Applying corresponding adjustments to mitigation outside an NDC

If an acquiring Party follows the target-based interpretation of using an ITMO by adding the ITMO amount to the target level of its NDC, there needs to be a 'corresponding adjustment' (in the opposite direction) of some other target level under the regime. A possible exception may be the creation of an ITMO outside of an NDC, which then requires stringent additionality testing (see Michaelowa and Butzengeiger 2017 for a discussion on additionality determination under Art. 6). A compulsory corresponding adjustment of the originator's target level - regardless of whether the ITMO originates in- or outside of the NDC - assures the target integrity of the regime (see Fig. 1.b). But one could also legitimately argue that since the Mitigation Outcome was outside the scope of the host Party's NDC, it could not possibly lead to double counting (i.e. also be used towards achieving the host Party's NDC), and that accordingly there should not be a corresponding adjustment of the host Party's NDC target level. This was, in fact, a critical point of conflict at the COP 24 negotiations (see Spalding-Fecher (2017) for an in-depth discussion of the underlying issues). Under the tally-based interpretation, an acquiring Party uses an ITMO by removing the corresponding amount from its final NDC tally. Here, the originator should compensate the use of a transferred ITMO coming from outside the NDC– *not* by adding the amount to its final NDC tally, but to its final *non*-NDC tally. This requires abandoning the Kyoto Protocol-inspired target-based interpretation of what it means to use ITMOs towards achieving one's target.

For accounting purposes, a mandatory ITMO (buffer) registry that differentiates between ITMOs from outside and within the scope of NDCs is now needed. Otherwise, there would not be any "debit" for the transferred ITMOs. When a Mitigation Outcome is transferred internationally, the ITMO registry account of the acquiring Party is credited with the ITMO amount, and that of the host Party is debited by the same amount. ITMO use leads to cancellation in the ITMO registry account of the using Party. Any final debit in ITMO accounts represents emissions that either need to be taken into account in establishing whether the host Party's NDC is achieved, or as representing user emissions covered by emission reductions outside the NDC. The buffer registry is one option in the negotiations, but a number of parties want to exclude Mitigation Outcomes generated outside an NDC altogether.

3.2 How to prevent double counting in general?

We define 'double counting' to refer to the usage of an ITMO by an acquiring Party and the usage of the corresponding MO by the originating Party (for discussions of double counting definitions see Schneider et al. 2017a, Amellina 2018 and Spalding-Fecher 2017). A macro-level interpretation of an acquiring Party using a Mitigation Outcome towards achieving its NDC seems to be tally-based, namely that the Mitigation Outcome has (or will have) lowered the relevant final tally by its amount. If an acquiring Party uses an ITMO by reducing its final tally and the emissions thus removed are not "reallocated" to the tally of another NDC, then the transfer by definition infringes the regime's tally integrity. The ITMO amount thus needs to be added to the final tally of the originating Party (see Fig. 1.c).

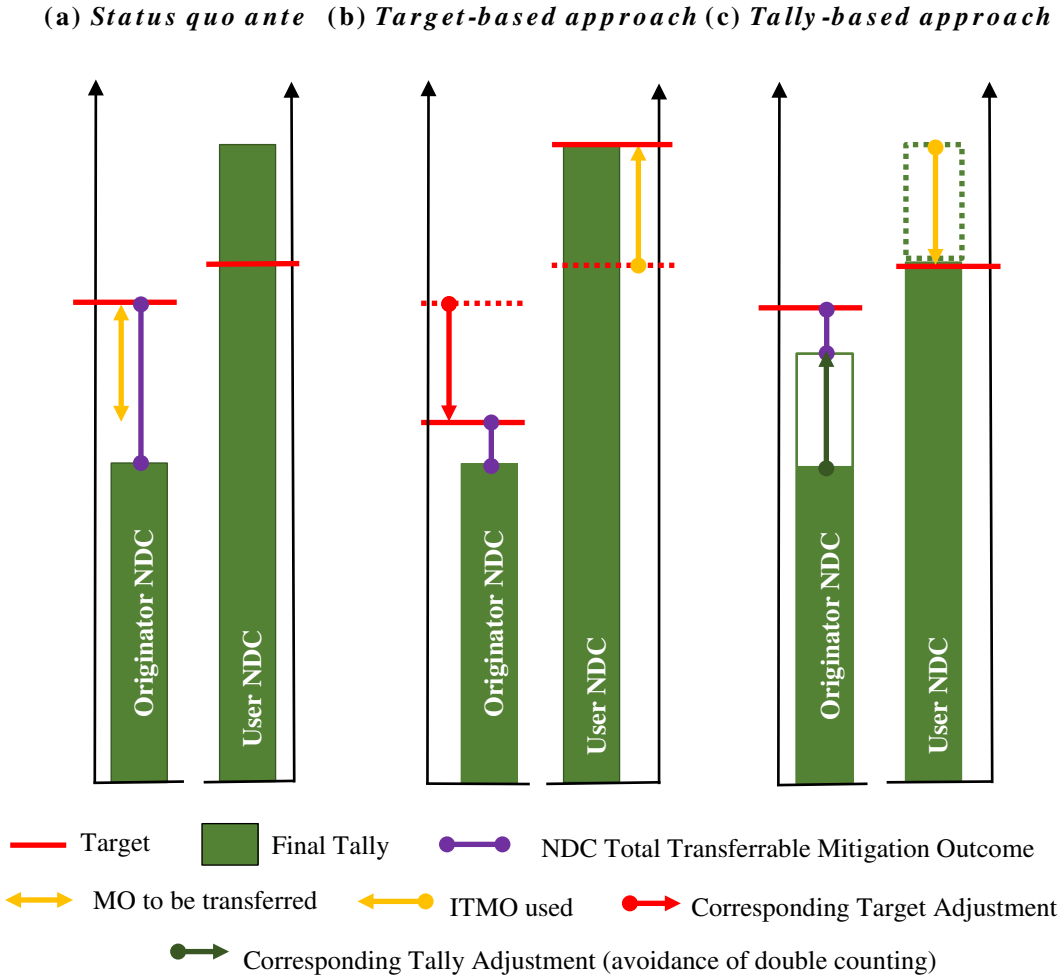

Figure 1. Corresponding Adjustments for ITMOs

What is the maximum Mitigation Outcome that an originating Party should be able to transfer internationally? The entire difference between the target level and the final tally may not constitute a genuine "mitigation outcome". Some may be "hot air", due to the choice of an unambitious target level (see discussion by Fuessler et al. 2014, Kollmuss et al. 2017, La Hoz Theuer et al. 2017 and Spalding-Fecher et al. 2017). We introduce a hypothetical concept referring to the level of the final tally, had there been no mitigation: the 'NDC Baseline Level' (see Danish Energy Agency et al. 2013 regarding national level baseline setting). The maximum Mitigation Outcome that a Party could claim is then given by the difference between the baseline level and the final tally. The maximum Mitigation Outcome eligible for transfer needs to be restricted to only those that go beyond the target level – i.e. the difference between the target and the final tally -, with target levels that go beyond the baseline (no 'hot air'). Testing this is obviously challenging, see Michaelowa and Butzengeiger (2017) and La Hoz Theuer et al. (2017).

4 A Visit to Middle Earth regarding transfers under Article 6.2

To give illustrative examples for Article 6.2 ITMO transfers, let us visit the fictional world of Middle Earth created by J.R.R. Tolkien as the stage for *The Hobbit* and *Lord of the Rings*.

What would an Article 6.2 transfer of a 10-unit Mitigation Outcome from the Kingdom of Rohan to the Kingdom of Gondor look like?

The status quo ante is shown in Table 1.a. As both kingdoms have a target below their baseline, final tally levels below the targets thus reflect genuine mitigation outcomes. Rohan's final tally is 10 units below its target, while Gondor has overshot its target by the same amount, and thus will not be able to achieve its NDC without acquiring 10 ITMOs[2].

At the time of transfer, the ITMO registry (or account in a UNFCCC-operated registry) of Rohan is debited with 10 units and that of Gondor is credited with the same amount, thus leaving them with –10 and +10 units respectively. As discussed above, Gondor has the choice of using the credited ITMOs in two different ways:

- changing its target level by adding 10 units, ('target-based use', Table 1.b) or
- changing its final tally by subtracting them ('tally-based use', Table 1.c).

In either case, the change has the effect of Gondor achieving its NDC, and Gondor's 10 credits are cancelled from the ITMO registry (indicated by the bracket notation). However, in order to safeguard the environmental integrity of the regime, Rohan is required to undertake some compensatory changes in the respective levels (i.e. target or final tally) of its own NDC, which in turn leads to the cancellation of Rohan's 10-unit debit in the ITMO registry.

Importantly, a target- (tally-) based use by the acquiring Party (Gondor) has to go hand-in-hand with a target- (tally-) based compensating change by the originating Party (Rohan). Mixing the two will either lead to an infringement of the target integrity (Table 1.e) or an apparent improvement of aggregate ambition due to leakage (of the emissions subtracted from Gondor's final tally) as illustrated in Table 1.d.

Table 1. ITMOs transferred from Rohan and used by Gondor

a. Status quo ante

	NDC Quantified Scope			ITMO registry
	Baseline	*Target*	*Final tally*	
Rohan	50	40	30	0
Gondor	100	80	90	0
Aggregate	*150*	*120*	*120*	*0*

b. Target-based interpretation of 'ITMO use' with corresponding target adjustment

	NDC Quantified Scope			ITMO registry
	Baseline	Target	Final tally	
Rohan	50	**30**	30	(–10)
Gondor	100	**90**	90	(+10)
Aggregate	*150*	*120*	*120*	*0*

c. Tally-based interpretation with corresponding tally adjustment

[2] Note that 'tally' levels are an accounting tool, which need not be identical with emissions inventories. Here, the status quo ante tally levels are taken to be identical with the NDC tally levels.

	NDC Quantified Scope			ITMO registry
	Baseline	*Target*	*Final tally*	
Rohan	50	40	**40**	(–10)
Gondor	100	80	**80**	(+10)
Aggregate	150	120	120	0

d. Tally-based interpretation with corresponding target adjustment

	NDC Quantified Scope			ITMO registry
	Baseline	*Target*	*Final tally*	
Rohan	50	**30**	30	(–10)
Gondor	100	80	**80**	(+10)
Aggregate	150	110	110	0

e. Target-based interpretation with corresponding tally adjustment

	NDC Quantified Scope			ITMO registry
	Baseline	*Target*	*Final tally*	
Rohan	50	40	**40**	(–10)
Gondor	100	**90**	90	(+10)
Aggregate	150	130	130	0

This concludes the macro-level analysis of ITMOs. We now turn to micro mitigation outcomes generated under the Article 6.4 Sustainable Development Mechanism (SDM).

5 Generating ITMOs from the Sustainable Development Mechanism (SDM)

We assume that SDM mitigation activities generate Certified Emission Reduction Units (CERUs). We denote CERUs originating from outside the host Party NDC as 'oCERUs' in contrast to 'iCERUs' generated within the scope of the host Party NDC (see Center for Clean Air Policy 2017 and Spalding Fecher 2017 for a discussion on ambition and credits from outside NDCs, Michaelowa 2017 regarding differences and similarities between Art. 6.2 and 6.4, and Schneider et al. 2016 regarding differences between Article 6 and the Kyoto Protocol Mechanisms). For iCERUs, the environmental integrity considerations described in section 3 for ITMOs apply, provided that baseline setting and additionality determination of the activities is done properly applying the experiences from the CDM (see Michaelowa and Butzengeiger 2017). oCERUs should be put in the selling party's buffer registry, as discussed in section 3.1 above. In the negotiations, the acceptance of oCERUs is slightly higher than that of ITMOs from outside NDCs under Art. 6.2.

6 Return to Middle Earth in the context of Article 6.4

The status quo ante situation of Gondor is still the same as on our initial visit. Now, let us assume that SDM activities hosted by Rohan have generated 15 CERUs: 5 (iCERUs) within the scope of Rohan's NDC, and 10 (oCERUs) outside it.

As shown in table 1.a., Rohan's NDC baseline is 50 units, its target 40, and its final tally 30. This means the total Mitigation Outcome in the period in question is 20 units, 10 of which – the difference between the target and the final tally – are transferrable as NDC ITMOs. The 5 iCERUs are assumed to be eligible for transfer. As regards Rohan's relevant emissions outside its NDC, the final tally is 40 units, and the SDM activities have achieved emission reductions equal to 10 oCERUs.

At the time of the transfer to Gondor, the iCERUs are removed from Rohan's CERU Registry and instead included as a debit in the ITMO Registry, with a corresponding credit for Gondor (Tables 2.b and 2.c).

ITMO usage leads to a reduction of the final tally of the using Party (Gondor), with a mandated compensating final tally adjustment by the host Party (Rohan). Once used by Gondor, the credit in its ITMO registry entry is cancelled (bracketed). Correspondingly, once the compensating tally adjustment is carried out by Rohan, its ITMO registry debit is cancelled.

Host Party tally adjustment depends on where the transferred CERUs were generated:

- iCERU use leads to a corresponding adjustment of the final host Party's NDC tally (see Table 2.b).
- oCERU use leads to a corresponding adjustment of the host Party's final non-NDC tally (see Table 2.c). If the host Party (Rohan) does not have a final non-NDC tally, the debit would remain un-cancelled in the ITMO registry and would thus be commensurate to the corresponding adjustment of the final tally.

Table 2. CERUs generated by Rohan, and used by Gondor

a. Status quo ante

	NDC Quantified Scope			non-NDC		National Total	
	Baseline	*Target*	*Final tally*	*Target (baseline)*	*Final tally*	*Target*	*Final tally*
Rohan	50	40	30	50	40	90	70
Gondor	100	80	90	300	300	380	390
Aggregate	*150*	*120*	*120*	*350*	*340*	*470*	*460*

	ITMO registry		CERU Registry	
	incl. iCERU	*oCERU*	*iCERU*	*oCERU*
Rohan	0	0	5	10
Gondor	0	0	0	0
Aggregate	*0*	*0*	*5*	*10*

b. Using CERUs generated within the scope of the host Party NDC (i.e. iCERUs)

	NDC Quantified Scope			non-NDC		National Total	
	Baseline	*Target*	*Final tally*	*Target (baseline)*	*Final tally*	*Target*	*Final tally*
Rohan	50	40	**35**	50	40	90	75
Gondor	100	80	**85**	300	300	385	385
Aggregate	*150*	*120*	*120*	*350*	*340*	*470*	*460*

	ITMO registry		CERU Registry	
	incl. iCERU	*oCERU*	*iCERU*	*oCERU*
Rohan	**(–5)**	0	**0**	**10**
Gondor	**(+5)**	0	0	0
Aggregate	*0*	*0*	*0*	*10*

c. Using CERUs generated outside the host Party NDC (i.e. 'oCERUs')

	NDC Quantified Scope			non-NDC		National Total	
	Baseline	*Target*	*Final tally*	*Target (baseline)*	*Final tally*	*Target*	*Final tally*
Rohan	50	40	30	50	**50**	90	80
Gondor	100	80	**80**	300	300	380	380
Aggregate	*150*	*120*	*110*	*350*	*350*	*470*	*460*

	ITMO registry		CERU Registry	
	incl. iCERU	*oCERU*	*iCERU*	*oCERU*
Rohan	0	**(–10)**	**5**	**0**
Gondor	0	**(+10)**	0	0
Aggregate	*0*	*0*	*10*	*0*

7 Conclusions

The question of accounting for transfers of ITMOs under the market mechanisms under Article 6 of the PA through corresponding adjustments is heavily contested, especially regarding the parameters used for the ITMOs and the treatment of Mitigation Outcomes achieved outside the scope of an NDC. This is due to different interpretations regarding the principle of environmental integrity that the accounting rules shall protect. These accounting challenges can be addressed as follows. Accounting can relate to the NDC target level or to a "final tally" of the parameter in which the NDC is denominated, with corresponding adjustments made in different directions depending on the approach. Accounting of ITMOs needs to be differentiated according to whether the emissions credit is generated from sectors covered by the NDC, or from outside of the NDC. As ITMO transfers from outside an NDC should not lead to an

adjustment of the NDC target or tally of the seller, a buffer registry is required where the seller's account can be debited accordingly. While this solution will not satisfy those who oppose the generation of Mitigation Outcomes outside an NDC, it ensures that any such Mitigation Outcomes will be accounted for, even if not directly against the NDC of the seller country.

8 References

Amellina, A. (2018). Institutional arrangements for reporting the use of market mechanisms under the enhanced transparency framework to avoid double counting, IGES Working Paper, Hayama

Asian Development Bank (2018). Decoding Article 6 of the Paris Agreement, Manila

Cames, M.; Healy, S. (2016). International market mechanisms after Paris, German Emissions Trading Authority (DEHSt), Berlin

Center for Clean Air Policy (2017). Using transfers to enhance ambition over the NDC cycles, Washington

Danish Energy Agency, OECD, UNEP Riso Centre (2013): National greenhouse gas emissions baseline scenarios. Learning from experiences in developing countries, Copenhagen

Fuessler, J., Herren, M., Kollmuss, A., Lazarus, M., Schneider, L. (2014). Crediting emission reductions in new market mechanisms - Part II: Additionality Assessment and Baseline Setting under Pledges, INFRAS, Zurich

Fuessler, J., Herren, M., Wunderlich, A., Michaelowa, A., Matsuo, T., Honegger, M., Hoch, S. (2015). Market mechanisms: Incentives and integration in the post-2020 world, INFRAS, Zurich

Graichen, J., Cames, M., Schneider, L. (2016). Categorization of INDCs in the light of Art. 6 of the Paris Agreement, German Emissions Trading Authority (DEHSt), Berlin

Howard, A., Chagas, T., Hoogzaad, J., Hoch, S., Greiner, S, Michaelowa, A. (2017). Features and implications of NDCs for carbon markets, Climate Focus, Amsterdam

IETA (2017). Operationalising Article 6 of the Paris Agreement. Perspectives of developers and investors on scaling-up private sector investment, London

Kollmuss, A., Schneider, L., Zhezherin, V. (2015). Has Joint Implementation reduced GHG emissions? Lessons learned for the design of carbon market mechanisms, Working paper No. 2015–7, Stockholm Environment Institute, Stockholm

Kreibich, N. (2018): Raising ambition through cooperation using Article 6 to bolster climate change mitigation, JIKO Policy Paper 03/2018, Wuppertal Institut, Wuppertal

La Hoz Theuer, S., Schneider, L., Broekhoff, D., Kollmuss, A. (2017). International transfers under Article 6 in the context of diverse ambition of NDCs, Working paper No. 2017–10, Stockholm Environment Institute, Stockholm

Michaelowa, A. (2017). The Paris market mechanisms' contribution to global greenhouse gas mitigation: Complementarities and tensions between Article 6.2 and Article 6.4, in: Stavins, R., Stowe, R. (eds): Market mechanisms and the Paris Agreement, Harvard Project on Climate Agreements, Cambridge, p. 63-66

Michaelowa, A., Butzengeiger, S. (2017). Ensuring additionality under Art. 6 of the Paris Agreement, Perspectives, Freiburg

Michaelowa, A., Hoch, S. (2017). Guardrails for the Paris mechanisms, in: Carbon Mechanisms Review, 3, p. 4-10

Mizuno, Y. (2017). Proposal for Guidance on robust accounting under Article 6 of the Paris Agreement, version 3, IGES, Hayama

Müller, B., Andrade T., Hession M., Kizzier K., Miguez J. (2018). Article 6: Market Approaches under the Paris Agreement, ecbi Policy Brief, European Capacity Building Initative, Oxford.

New Climate Institute (2018). Opportunities and safeguards for ambition raising through Article 6. The perspective of countries transferring mitigation outcomes, Berlin

Obergassel, W., Asche, F. (2017). Shaping the Paris Mechanisms Part III - An update on submissions on Article 6 of the Paris Agreement, JIKO Policy Paper 05/2017, Wuppertal Institut, Wuppertal

Schneider, L., La Hoz Theuer S. (2018): Environmental integrity of international carbon market mechanisms under the Paris Agreement. Climate Policy, DOI: 10.1080/14693062.2018.1521332

Schneider, L., Broekhoff, D., Cames, M., Healy, S., Füssler, J., La Hoz Theuer, S. (2016). Market mechanisms in the Paris Agreement – Differences and commonalities with Kyoto Mechanisms, German Emissions Trading Authority (DEHSt), Berlin

Schneider, L., Füssler, J., Kohli, A., Graichen, J., Healy, S., Cames, M., …Cook, V. (2017a). Robust accounting of international transfers under Article 6 of the Paris Agreement, German Emissions Trading Authority (DEHSt), Berlin

Schneider, L., Füssler, J., La Hoz Theuer, S., Kohli, A., Graichen, J., Healy, S., Broekhoff, D. (2017b). Environmental integrity under Article 6 of the Paris Agreement, Umweltbundesamt, Berlin

Spalding-Fecher, R. (2017). Article 6.4 crediting outside of NDC commitments under the Paris Agreement: issues and options, Carbon Limits, Oslo

Spalding-Fecher, R., Sammut, F., Broekhoff, D., Füssler, J. (2017). Environmental integrity and additionality in the new context of the Paris Agreement crediting mechanisms, Carbon Limits, Oslo

Tolkien, JRR (1968). The Lord of the Rings, Allen & Unwin, London